REMARKS

Claims 17-27 and 29-35 are pending in this application. Claims 17-27 and 29-35 were previously allowed, but the Examiner has withdrawn the Allowability of those claims. Currently, claims 17-27 and 29-35 stand been rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,072,787 to Hamalainen et al. (hereinafter "Hamalainen"). The Applicant respectfully disagrees.

Claim 17 of the present invention recites a base station comprising a means for allocating at least one channel for a communication, a means for monitoring said communication and determining an adjusted data rate for supporting said communication, and a means for reallocating channels to support said communication. In accordance with the present invention, a base station dynamically adjusts channel assignments based on changed data rate requirements. The base station initially assigns a radio resource for a communication and monitors a change of a data rate requirement for the communication. If the base station detects a change of data rate requirement to support the communication, the base station adjusts radio resources to support the changed data rate requirements. The present invention discloses as follows:

> For ISDN service, the dynamic bandwidth allocation refers to selective allocation of the D and B channels in a D, D and B, or D and 2B bearer channel configuration as needed and tearing them down when they are idle.

> When an ISDN call is initiated, the D channel is established first (step 402). The bandwidth required for the particular application is communicated from the calling ISDN equipment to the called ISDN equipment through messages on the D channel (step 404). These messages are in HDLC format and the RCS 104 monitors these messages via an HDLC interface (step 406). Once the RCS 104 determines how many B channels are required (step 408) it initiates establishment of these bearer channels over the air interface (step 410). The RCS continues monitoring the HDLC messages on the D channel during the ISDN call (step 412) and determines if additional B channels are to be switched in or out. In case that additional B channels should be switched in or out, the RCS 104 initiates the establishment or tearing down of the bearer channels over the air interface (step 414).

(See paragraphs 0067 and 0068). In accordance with the example provided above, the base station of the present invention first establishes a D channel and assigns one or more B channels for an ISDN call in accordance with D channel messages. The base station constantly monitors D channel messages to detect a change of required data rate for the ISDN call and tears B channels in and out for the ISDN call.

In contrast, Hamalainen discloses a scheme of adjusting channel assignments by monitoring radio resources which are available to a base station. In Hamalainen, a mobile station indicates at the beginning of call set-up the maximum and minimum data rate requirements, and a base station dynamically adjusts radio channels in accordance with available radio resources. If there are enough available radio resources, the base station increases the number of channels already

assigned to a call to provide up to the maximum data rate, and if the available radio resources are not enough, the base station decreases the number of channels already assigned to existing calls in order to serve other call requests while guaranteeing only the minimum data rate. Hamalainen discloses as follows:

> In accordance with the present invention, the mobile station indicates at the beginning of call set-up the minimum and the maximum requirements for the data transfer rate of user data ... (column 5, lines 44-46).
>
> the mobile communication network ... increases the channel configuration ... to a desired level when the resources required therefore are released in the same cell. ... the mobile communication network may ... reduce the channel configuration ... to release resources ... to serve other traffic. (column 6, lines 35-42).
>
> FIG.8 illustrates the adjustment of the data transfer rate during a call in accordance with the invention. The base station system BSS detects that there are free time-slot resources in the base station system for a data call ... In that case, the BSS commands the MS to use a higher data transfer rate and a larger number of time-slots by carrying out a handover within the base station or a new channel assignment. (column 8, lines 17-29, emphasis added).
>
> Correspondingly, ... it is possible to reduce the channel configuration ... of one or more data calls, ... when the base station system BSS detects that it needs free time-slots for other traffic in the cell. (column 8, lines 42-48, emphasis added).

In Hamalainen, a base station detects free radio resources or lack of radio resources prior to adjusting channel assignments to an existing call. A base station in Hamalainen does not monitor a change of data rate requirement of the call. In Hamalainen, a maximum and minimum data rate for the call is initially determined

and channels are adjusted to support a data rate between the maximum and the minimum depending on available radio resources.

In contrast, the base station of the present invention adjusts channel assignments based on the change of data rate requirements of the call, not a change of available radio resources. Even though the channel assignments in the present invention should also be performed within the available radio resources, the triggering event for an adjustment of channel assignments is not the change of the available radio resources, but a changed data rate requirement of the communication itself. As provided as an example in the present invention, if a communication requires 2B+D data rates during a communication in a B+D rate, the base station detects the increased requirement through the D channel messages and adjusts channel assignments to support the increased data rate requirements. This scheme is neither disclosed nor suggested by Hamalainen. Therefore, claim 1 is not anticipated by Hamalainen.

With respect to claim 29, claim 29 also recites means for determining a first data rate to support a first communication, and means for monitoring a determining means to initiate reallocation of communication channels to change the data rate. In accordance with claim 29, the base station initiates reallocation of communication channels in accordance with a changed data rate which is determined by the determining means. Hamalainen fails to disclose this scheme.

Therefore, claim 29 is not anticipated by Hamalainen for the same reason stated above with respect to claim 17.

Claims 18-27 and 30-35 are dependent claims of claims 17 and 29, respectively. Therefore, it is believed that claims 18-27 and 30-35 are also allowable for the same reasons presented above.

For the reasons stated above, the Applicant respectfully submits that the presently claimed invention is patentable over the prior art. Reconsideration and allowance of the claims is respectfully requested.

Respectfully submitted,

Fatih M. Ozluturk

By _____
John C. Donch Jr.
Registration No. 43,593
(215) 568-6400

Volpe and Koenig, P.C.
United Plaza, Suite 1600
30 South 17th Street
Philadelphia, PA 19103

JCD/dmr